

## CLAIMS

1. Device for determining the temperature of a cooking vessel, said cooking vessel having an underside and with said underside being placed on a hotplate of a heating appliance, on said hotplate being defined at least one heating zone and said cooking vessel being placed on said heating zone, wherein:
  - at least one flat measuring element is provided
  - said flat measuring element having a top surface for contact with said underside of said cooking vessel
  - said flat measuring element being placed on the top of said hotplate
  - a device being provided for determining the temperature of said measuring element.
2. Device according to claim 1, wherein said device being provided for determining the temperature of said measuring element is at least one sensor, said sensor being placed below said hotplate.
3. Device according to claim 2, wherein said device for determining the temperature of said measuring element is an infrared sensor.
4. Device according to claim 1, wherein at least one said measuring element is formed by a material coating applied in self-adhesive manner to said top of said hotplate.
5. Device according to claim 4, wherein said material coating is being constituted by a printed-on colour coating.
6. Device according to claim 1, wherein at least one said measuring element is formed by a separate and thin material portion being fixed to said top of said hotplate.

7. Device according to claim 6, wherein said measuring element is a metal foil.
8. Device according to claim 6, wherein said measuring element is bonded to said top of said hotplate.
9. Device according to claim 1, wherein said top surface of said measuring element projects slightly over said top of said hotplate.
10. Device according to claim 9, wherein said top surface of said measuring element projects between 0.05 and 0.15 mm over said top of said hotplate.
11. Device according to claim 1, wherein in said vicinity of said heating zone are provided several measuring elements.
12. Device according to claim 11, wherein in said vicinity of said heating zone are provided three said measuring elements in a triangular arrangement.
13. Device according to claim 1, wherein said cooking zone has a centre and at least one said measuring element is positioned eccentrically to said centre..
14. Device according to claim 1, wherein said cooking zone has a centre and none said measuring element is positioned in said centre.
15. Device according to claim 1, wherein said measuring element is at least partially made of a good heat conducting material with a low heat capacity.

16. Device according to claim 1, wherein said hotplate is at least partially made of a material with a good radiation transparency for infrared radiation, said infrared radiation at least ranging from a colour temperature range between room temperature and approximately 250 to 300°C.
17. Device according to claim 1, wherein said heating zone is heated by an induction heating device, said induction heating device having at least one induction coil.
18. Electric heating appliance with a hotplate, on said hotplate being defined at least one heating zone, said heating zone being heatable by a heating device, said heating device being positioned below said hotplate, said electric heating appliance further including a device for determining the temperature of a cooking vessel being placed on said heating zone, wherein said device for determining the temperature of said cooking vessel is constructed in accordance with claim 1.
19. Electric heating appliance according to claim 18, wherein said heating device is an induction heating device, said induction heating device including at least one induction coil.
20. Method for determining the temperature of a cooking vessel being placed on a hotplate of a heating appliance, on said hotplate being defined at least one heating zone, said cooking vessel having an underside and with said underside being placed on said heating zone, wherein the following steps are provided:
  - provision of at least one flat measuring element on said heating zone for contact with said underside of said cooking vessel, said flat measuring element having a top surface

- setting down said cooking vessel on said heating zone in such a way that said underside of said cooking vessel comes into contact with said top of said measuring element,
- determination of the temperature of said measuring element.

21. Method according to claim 20, wherein said temperature of said measuring element is being measured from below and through said hotplate.
22. Method according to claim 21, wherein said measuring element has an underside, said underside emitting heat radiation, said heat radiation being emitted through said hotplate, said heat radiation being measured and from this said temperature of said measuring element is being determined.

FOOTER: 5/2/2004